SAF-RC-001 Industrial Hygiene Sampling FINAL DATA

NO DISTRIBUTION REQUIRED

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SDG <u>06I-0181-02</u> SAF-RC-001

Rad only X Chem only Rad & Chem

X Complete

Partial

300 Area 303M Bldg







Cover Page

Report Identification Number:

06I-0181-02

Subcontract Number:

0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R303M0 J451

Payroll#: 73513

Web Page: www.datachem.com

E-mail: lab@datachem.com

Sample Information

Sample Date	Customer Sample Number	Laboratory Sample Number	Method	Analytical Batch Identification	Sample Matrix
16 Jan 2006	J10RR9	06I01518	NMAM 7300M	G060K00K	G WIPE
16 Jan 2006	J10WP2	06I01519	NMAM 7300M	G060K00K	G WIPE
16 Jan 2006	J10X05	06I01520	NMAM 7300M	G060K00K	G WIPE

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Phone: (801) 266-7700

FAX: (801) 268-9992

Name: Lisa M. Reid Title: Chemist

Date: January 19, 2006





Case Narrative Page

Report Identification Number: 06I-0181-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

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General Set Information: There are 4 samples in set 06I-0164-01, 3 samples in set 06I-0180-02 and 3 samples in set 06I-0181-02. The samples were analyzed for cadmium, lead and beryllium on Ghost Wipe. No problems were encountered with the receipt of these samples and no contact with the CTR was required.

Method Summary: Samples were transferred to 50 ml centrifuge tubes and digested in the presence of 5 mL of nitric acid and 5 mL of ASTM Type II water. Samples were digested in a hot block set at 110°C for 60 minutes. Samples were then diluted to a 25 mL volume with ASTM Type II Water. Samples were shaken and delivered for ICP analysis.

Sample Preparation: All samples were prepared in accordance with DCL SOP "IH-AN-021" and NIOSH method NMAM 7300 modified for hot block digestion.

Holding Times: The holding times were met for both sample preparation and analysis.

Instrument Calibration: Instrument calibration was performed in accordance with NIOSH method NMAM 7300.

Initial and Continuing Calibration Verification Analysis: Beryllium, cadmium and lead recoveries in all Initial Calibration Verification (ICV) and Continuing Calibration Verification (CCV) samples are within the quality control limits of $\pm -10\%$.

Initial and Continuing Calibration Blank Analysis: No beryllium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.01 ug/sample. No cadmium results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 0.07 ug/sample. No lead results were found in the Initial Calibration Blank (ICB) or Continuing Calibration Blanks (CCB) at levels above the Contract Required Detection Limits (CRDL) of 2. ug/sample.

Method Blank Analysis: No beryllium, cadmium or lead was found in any of the media blank samples above the Contract Required Detection Limit (CRDL).

Dilution(s): None.

DataChem Laboratories, Inc. 960 West Levoy Drive Salt Lake City, Utah 84123-2547 Phone: (801) 266-7700 FAX: (801) 268-9992

Web Page: www.datachem.com E-mail: lab@datachem.com





Case Narrative Page

Laboratory Control Sample and Duplicate Analysis: Two Laboratory Control Samples (LCSs) and two Laboratory Control Sample Duplicates (LCSDs) were prepared and analyzed with the sample batch. The LCS results were within the control limits of +/- 20%. The Relative Percent Difference (RPD) between the LCS and the LCSD were within the control limit of 20%.

Replicate Analysis: One sample in this batch was replicated. The RPD between the samples and the replicates was within the control limit of 20%. If the result of the sample or replicate is below the CRDL, replicate analysis is negligible.

Flagging Codes: None

Nonconformance/Corrective Action Report (NC/CAR): N/A

Sample Calculation: The final results are calculated by the following equation:

Final result for aqueous samples (μ g/sample) = (A) x (B) x (C)

Where:

A = Analyte concentration from instrument determination ($\mu g/L$)

B = Concentration factor from sample preparation

= Final Volume of Digestate (L)

Sample

C = Dilution performed at time of analysis

Example Calculation: $(1 \mu g/L) \times (0.025 L/sample) \times (1) = 0.025 \mu g/sample$

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Miscellaneous Comments: None





Report Page

Report Identification Number: 06I-0181-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF#: RC-001 / R303M0 J451

Payroll#: 73513

Customer Sample Number	Laboratory Sample Number Analyzed		Beryllium µg/sample		Cadmiun µg/sampl	i	Lead μg/sample		
J10RR9	06I01518	18 Jan 2006	< 0.01	U	< 0.07	כ	<2.	U	
J10WP2	06I01519	18 Jan 2006	< 0.01	U	< 0.07	U	<2.	U	
J10X05	06I01520	18 Jan 2006	< 0.01	U	< 0.07	U	<2.	U	
	0	.01	0.	07		2.			
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U - Parameter not detected above LOD.

J - Parameter between LOD and RDL.





QC Summary Page

Report Identification Number: 06I-0181-02

Subcontract Number: 0000X-BO-G0058-B-Mod#4

Name of Industrial Hygienist: Denise A. Pitts / Henry W. Ruby

Laboratory Identification Number: DCHM

SAF: RC-001 / R303M0 J451

Payroll#: 73513

Batch ID: G060K00K

QC Sample ID	QC Type	Analyte	Units	Result	Parent Result	Target	Percent Rec.	Relative Percent Diff.
BL-240171-1	MB	Beryllium	μg/sample	ND	NA	NA	NA	NA
BL-240171-1	MB	Cadmium	μg/sample	ND	NA	NA	NA	NA
BL-240171-1	MB	Lead	μg/sample	ND	NA	NA	NA	NA
QC-240171-1	LCS	Beryllium	μg/sample	10.8	NA	10.0	108.	NA
QC-240171-1	LCS	Cadmium	μg/sample	32.4	NA	30.0	108.	NA
QC-240171-1	LCS	Lead	μg/sample	102.	NA	100.	102.	NA
QD-240171-1	LCSD	Beryllium	μg/sample	10.8	10.8	10.0	108.	0.483
QD-240171-1	LCSD	Cadmium	μg/sample	32.2	32.4	30.0	107.	0.718
QD-240171-1	LCSD	Lead	μg/sample	102.	102.	100.	102.	0.496

MB - Method Blank

LCS - Laboratory Control Sample

LCSD - Laboratory Control Sample Duplicate

MS - Matrix Spike

MSD - Matrix Spike Duplicate

LD - Laboratory Duplicate

NA - Not Applicable

ND - Parameter not detected above LOD

LCS, LCSD Percent Rec. = (Result / Target) * 100.0

MS, MSD Percent Rec. = ((Result - Parent) / Target) * 100.0

LCS, LCSD Relative Percent Diff. = ((|LCS - LCSD|) / ((LCS + LCSD)/2.0)) * 100.

MS, MSD Relative Percent Diff. = ((|MS - MSD|) / ((MS + MSD)/2.0)) * 100.

LD Relative Percent Diff. = ((|Parent - LD|) / ((Parent + LD)/2.0)) * 100

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at - 0/81-01,02

Page I of Z

CHAIN OF CUSTODY/SAMPLE ANALYSIS REQUEST Project Coordinator Company Contact Telephone No. Data Turnaround 531-1229 Tones Denise A. Pitts and Henry W. Ruby Joan H. Kessner SPECIAL INSTRUCTIONS SAF No. Sampling Location 24 All relevant COAs must be provided: RC-001 73513 300 Area Method of Shipment R303MO J451 Type of Sample: wipes = airborne FED FX ANALYSIS METHOD (SPECIFIC): Bill of Lading/Air Bill No. Wipe Sample Media:
Ghost A-Yes No Shipped To: Dectachen NIOSH 7300 9337 5330 8541 Sattlale Other BOSSIBLE SAMPLE HAZARDAREMARKS

De, PO, CO MATRIX - AIR | - WIPE | OTHER Preservation (i.e., cooling required, etc.) No No No Nρ No No Special Handling and/or Storage No Νo na Х nα SAMPLE ANALYSIS Beryllium Lead Cd Cd Asbestos Lead Beryllium VOLUME (L) or Wipe Airborne Airborne Airborne Wipe Airborne Wipe Mold SAMPLE NO. MATRIX SAMPLE DATE na JA \nearrow **X**-Raw X Ma JOX43. Æ 1-16-06 na 1-16-06 X Flant \star NA na N 1JOX44 (-16-0p 854 MOX45 Fersonal) 1-16-06 X Ma A Na Blank MEZUSIV X X JIORRA WI NA X ma 1-16-06 TOWPZ ALI Blank X X 1-16-06 WI 1-16-06 NO × 20 J10X05 1000m2 10% NRD WI 1-16-06 na X_ 44, 1-16-06

WCH-\$H-202 (08/29/2005)

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WCH-SH-202 (08/29/2005)

Page 2 01 2



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Type of Sample:	Type of Sample: 303 MBuilding				R303M ANALYSIS M) [×		20			
Shipped To: Wipe Sample Media: Ghost Des Cott				NIOSH 7300					Bill of Lading/Air Bill No.				20133		
BOSSIBLE SAMPLE I De Pb, Special Handling and	HAZARD/REMARKS	MATRIX A - AIR		Preservation (i.e., cooling required, etc.)		No	No	No	No	No	No	No	No	na	
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